UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,324	08/22/2003	Shao-Chun Chen	14121US02	9684

23446 7590 01/08/2007	EXAMINER	
MCANDREWS HELD & MALLOY, LTD	ROCHE, TRENTON J	
500 WEST MADISON STREET		
SUITE 3400	ART UNIT	PAPER NUMBER
CHICAGO, IL 60661	2193	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/646,324	CHEN ET AL.
	Examiner	Art Unit	
	Trenton J. Roche	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 August 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *20031203, 20041012*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

1.   This Office action is responsive to communications filed 22 August 2003.

2.   Claims 1-24 are currently pending and have been examined.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   Claims 1-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter.

        The invention as disclosed in claims 1-15 is directed to non-statutory subject matter. The

claimed invention as a whole must accomplish a practical application. That is, it must produce a

"useful, concrete and **tangible** result." (State Street Bank & Trust Co. v. Signature Financial Group

Inc., 149 F.3d at 1373, 47 USPQ2d at 1601-02.)

6.   Specifically, the claims are directed to a network for updating contents of an electronic

device, however, the claim as currently written does not impart any positive functionality which

would produce a useful, concrete and tangible result. The alleged benefit of the updating of contents

of a device is merely recited in the preamble of the claim, and is not recited in the actual body of the

claim. As such, the claim is simply setting out the various components of the network (electronic

device, distribution environment, communication link, etc.) without specifically showing that the

claimed components perform any actions which would product a useful, concrete, and tangible

result, such as the end (and tangible) result of the updating of the content image on the device. The

recitation of generating data is not sufficient as there is no tangible benefit being derived from the

generation of the data; the claim does not state how this data is even used. Consequently, the claims

are non-functional descriptive material which merely represent an abstract idea or concept, and do

not impart a certain level of "real world" value or practical application for the claimed invention.

The intended functionality of updating content of a device is merely an allegation towards

functionality, as the claim does not disclose any details pertaining to the actual updating of the

content. Thus, Applicants fail to disclose that the claimed invention has a practical application which

produces a useful, concrete, and tangible result under the State Street Formulation.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,925,467

to Gu et al. ("Gu").

Per claim 1:

Gu discloses:

- a network for updating contents of an electronic device ("to update the original file 110

  hosted on the client device..." in col. 4 lines 12-13)

- an electronic device including an update environment (Note Figure 1 and the corresponding

  sections of the disclosure.)

- a distribution environment for transferring data to the electronic device; a communication

  link for linking the electronic device and the distribution environment ("a first computer

  system 102 and a second computer system 104 communicate via a communication path

106…communication path 106 includes any medium by which files are communicated or

transferred between the computer systems 102 and 104." in col. 3 lines 21-29)

- a generation environment for generating the data ("generates a difference file…" in col. 3

lines 58-59)

substantially as claimed.

Per claim 2:

Gu further discloses the system constituting a fault tolerance system for updating as claimed

("checksum bits or bytes so that errors can be detected following transmission of the delta file…" in

col. 4 lines 64-65)

Per claims 3, 4, 9 and 10:

Gu further discloses the distribution environment being a carrier network/cable TV network and

the communication link being wireless or wired as claimed (Note col. 3 lines 29-39. A cable TV

network would be a wired connection.)

Per claim 5:

Gu further discloses a download agent and an update agent as claimed ("The delta file 116 is

transferred to transmitted to another computer system via the communication path…file updating

alorigthm 118 hosted on the receiving computer system…" in col. 4 lines 5-10)

Per claims 6, 7 and 8:

Gu further discloses deleting, replacing, and adding a portion of the contents as claimed ("The edit

operations...one byte insertion...one byte deletion...one byte replacement..." in col. 6 lines 30-34)

Per claim 11:

Gu further discloses the data being an update package as claimed (Note col. 3 lines 40-51)

Per claim 12:

Gu further discloses transferring the generated data to the distribution environment electronically as

claimed (Note the rejection of claim 1. Data transfer in a electronic computer system is transferred

electronically.)

Per claim 13:

Gu further discloses removable media as claimed ("removable fixed mediums..." in col. 3 lines 36-

37)

Per claims 14 and 15:

Gu further discloses the contents of the device being firmware and software ("software

components...firmware files..." in col. 3 line 46)

Per claim 16:

Gu discloses:

- a method for updating contents of an electronic device in an updating network having an electronic device, a distribution environment, and a generation environment (note the rejection regarding claim 1)

- reading an original image of the contents; reading a new image of the contents, comparing the objects of the original image of the contents to the objects of the new image of the contents ("The file differencing algorithm 114 receives the new file 112, compares it to the original file 110, and calculates the byte-level differences between the compared files..." in col. 3 lines 52-54)

- applying a bubble to the original image of the contents to align an object in the original image of the contents with the corresponding object in the new image of the contents (Note col. 6 app. lines 40-45. The system of Gu adjusts the streams such that byte sections are aligned, such as the 'i', 't', 'e' and 'r' bytes are aligned in the table depicted. The edit operation is interpreted as an applied "bubble.")

- repeating (c) and (d) until all objects of the original image and the new image have been compared (The file differencing algorithm compares the entire file.)

- saving the original image of the contents with the applied bubbled as a modified original image of the contents (provides any differences between the original 110 and the new 112 files in the delta file..." in col. 4 lines 1-2)

- generating an update package comprising the difference between the new image of the contents and the modified original images of the contents ("generates a difference files 116, referred to herein as a delta file...The delta file 116 includes meta-data along with actual data of replacement and/or insertion operations..." in col. 3 lines 58-64)

- transferring the update package to the distribution environment; downloading the update

  package from the distribution environment to the electronic device ("the delta file 116 is

  transferred or transmitted to another computer system via the communication path…" in

  col. 4 lines 5-6)

- updating the original image of the contents in the electronic device ("update process…" in

  col. 4 lines 14-15)

substantially as claimed.

Per claims 17-21:

Gu further discloses bubbles to add padding bytes and removing bytes as claimed (Note col. 6 app.

lines 40-45. The system of Gu adjusts the streams such that byte sections are aligned, such as the 'i',

't', 'e' and 'r' bytes are aligned in the table depicted. The edit operation is interpreted as an applied

"bubble" and the operations add and remove bytes.)

Per claims 22 and 23:

Note the rejection regarding claim 14 and 15, respectively.

Per claim 24:

Gu further discloses the aligned object being in a similar portion of binary code between the original

image and the new image as claimed (Note the rejection regarding claim 16)

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Trenton J. Roche whose telephone number is (571) 272-3733. The examiner

can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where

this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system,

see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system,

contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Trenton J Roche
Examiner
Art Unit 2193

TJR

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